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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,732	03/10/2004	Ramiro Quintero Illera	68349-00008USPX	3413

23932 7590 01/03/2007  
JENKENS & GILCHRIST, PC  
1445 ROSS AVENUE  
SUITE 3200  
DALLAS, TX 75202

EXAMINER
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LE, HOANGANH T

ART UNIT	PAPER NUMBER
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2821

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/797,732	<b>Applicant(s)</b> QUINTERO ILLERA ET AL.	
	<b>Examiner</b> HoangAnh T. Le	<b>Art Unit</b> 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 and 33-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 9, 10, 25-29 and 33-40 is/are rejected.
- 7) ☒ Claim(s) 4-8 and 11-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



**HoangAnh Le**  
**Primary Examiner**

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/06&amp;12/06</u>  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. The amendment filed on November 06, 2006 is acknowledged.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3,9,10, 25-29,33-34, and 37-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Bae (the US Patent No. 6,359,589, of record).

The Bae reference teaches in figures 10-11 an antenna system comprising: an antenna element 62 and a ground plane comprising: at least two conducting surfaces 40,41, the two conducting surfaces being connected by at least a one conducting strip 42 which allows current to flow from one conducting surface to another, the strip being narrower than the width of any of the two conducting surface (figure 11). The ground plane is disposed in a plane substantially parallel to a plane of the antenna element (figure 11). The conducting surfaces are on a common planar or curved surface (figure 11). Two edges of at least two conducting surfaces are placed substantially parallel to each other, and the at least one conducting strip connecting the two conducting surfaces is placed substantially centered with respect to the gap defined by the two substantially parallel edges (figure 11). The ground-plane comprising a plurality of conducting surfaces on the same planar or curved surface, wherein at least two of the

conducting surfaces are connected by a conducting strip (figure 11) The antenna device includes a monopole antenna (figure 10). The antenna device is included in a cellular telephone, a cordless telephone, a personal digital assistant (PDA), a wireless paging device, an electronic game device or a remote control (figure 11). The ground-plane is included in a handheld wireless device and wherein the antenna device includes a microstrip patch antenna configuration or a planar inverted-F (PIFA) antenna configuration (figure 11). The opposing edges of adjacent conducting surfaces are linear in shape and disposed one from the other in parallel spaced relationship (figure 11).

The limitation "wherein the ground-plane contributes to the radiation performance of the antenna system by increasing a number of frequency bands of the antenna system so as to enhance a multiband behavior of the antenna system" is merely functional language which fails to patentably distinguish the claims.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bae (cited above) in view of Maruyama et al (the US Patent No. 6,400,330, of record)

The Bae reference teaches every feature of the claimed invention, excluding the antenna system being mounted inside a rear-view mirror of a vehicle.

The Maruyama et al reference teaches in figure 5 an antenna being mounted inside a rear-view mirror of a vehicle in order to improve the characteristics of the antenna.

Since one of ordinary skill in the art would recognize the benefit of improving the characteristics of the antenna, it would have been obvious to provide Bae with the antenna system being mounted inside a rear-view mirror of a vehicle as taught by Maruyama et al.

2. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bae (cited above) in view of Endo et al (the US Patent No. 6,271,798).

The Bae reference teaches every feature of the claimed invention, excluding the antenna system being mounted inside a keyless door lock operation device.

The Endo et al reference teaches in figure 1 an antenna being mounted inside a keyless door lock operation device in order to improve the characteristics of the antenna.

Since one of ordinary skill in the art would recognize the benefit of improving the characteristics of the antenna, it would have been obvious to provide Bae with the antenna system being mounted inside a keyless door lock operation device as taught by Endo et al.

***Allowable Subject Matter***

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3. Claims 4-8, and 11 -24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-3,9-10,25-29, and 33-40 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

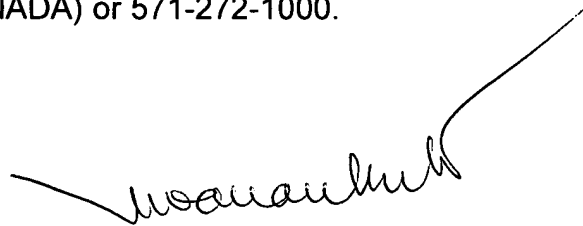
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HoangAnh T. Le whose telephone number is (571) 272-1823. The examiner can normally be reached on 8:00am-4:30pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Hoanganh Le', with a long, sweeping line extending from the end of the signature towards the top right of the page.

**Hoanganh Le**  
**Primary Examiner**